

# Product Enhancement of ECM Suite

“Client was seeking specific enhancements to their suite of Enterprise Content Management products to improve their market share....”

## The Client

The client is a leading provider of document workflow and imaging solutions for Enterprise Content Management (ECM) and business process automation. With more than 30 years of industry experience, they have a host of content software solutions to help organizations transform unmanageable paper-based processes into efficient, easy-to-use electronic solutions. The ability to manage content and streamline processes enables companies to drive a significant return on investment.

## The Business Challenge

The client provides enhanced document imaging and storage solutions. To meet increased regulatory and business requirements, the solutions must:

- Ensure that all scanned documents be aggregated and stored centrally
- Facilitate efficient retrieval of information from the central repository
- Permit advanced keyword and field level searches
- Allow easy redaction and annotation
- Allow automatic archiving to assist users in quickly reviewing and editing thus supporting efficient workflow.

Telliant was chosen by the client to develop and enhance the following features for their document imaging software product suite:

- Ability to store high-value documents in a secure and reliable environment
- Implement the security for user/groups access for the retrieval of the records from the database using Azman feature
- Software solution to capture any document using its standard printing application's Print function with metadata for easy retrieval.
- Ability to convert text input files into records and documents which are archived within the database
- Develop web-based solution to support multiple browsers for scanning and importing document from web application to store in archive with the metadata in place
- Migrate the existing application to support cloud-based environment for storing & retrieving the documents
- Enhance the export features of their application with contents from one database and import the application along with its contents into another database
- Create a web-based doc retrieval application that allows the user to search, edit data fields and delete images for document that have been archived
- Generate interactive reports from various server side application for enhanced workflow & web administration

## The Engagement

The scope of services provided by Telliant included the following:

- Gathering of business requirements and technical specifications
- Design and development of new features
- Performance analysis, benchmarking and solution identification
- Project based and routine application Quality Assurance management
- Ongoing application maintenance and change management
- Excellent understanding of the content management domain while being a long-term partner
- Offshore customer-centric delivery model that reduces time to market and lowers cost of solution development
- Quick response to issues and operational challenges with client work schedule



“Telliant assembled a team consisting of Business Analysts, Software Engineers, QA Engineers and a Project Manager that worked with consultants & 3rd party partners to achieve the objective optimally.”



## Solution Highlights

Telliant delivered a solution that comprehensively addressed the client's needs. The highlights of the solution are provided below:

**Document Locator Features:** Designed and implemented an advanced find feature to enhance the user's ability to search records with the following options:

- Cross application search capability
- Simple search mode (Google-like search capabilities)
- Advanced field level search
- Advanced keyword search
- Configurable search results list

**Security of Archiving Systems:** High level secured archiving system was developed using CAS (Content Addressable Storage). Documents that are stored into the database can be archived when the primary hard disk space exceeds a set-point and documents can be retrieved from the archive whenever necessary. Designed and implemented multi-level security measures for the archival and retrieval process including hashing techniques.

**Roles-based Security:** Designed, developed and implemented increased levels of security for the applications including user/group & record level security. Roles-based security was added, allowing a user to be authenticated and authorized based on their particular operational responsibilities.

**Virtual Printer:** Archiving documents can be done from the desktop/tablet without requiring the user to physically print the document. It captures the images allowing the user to enter metadata storing documents with attached metadata into the server database.

**Web-based Scanning:** Using ActiveX, which supports multiple browsers and various versions, the documents can be scanned from web-based applications and stored in the content server. Microsoft's open source TWAIN DLL was utilized to develop the application without any third party tools, and used the plug-in to support the browsers like Chrome & Firefox.

**Text-searchable PDF:** Created an enhanced output option to produce text-searchable PDFs instead of image only documents. Files can be indexed directly from the desktop and retrieved in its native format (Word, Excel, etc.)

**Importing & Exporting:** Delivered a web-based solution for importing the exported application along with its content into the content server database. This feature is helpful for importing existing applications which are migrated from other databases into the content server. When any application is imported, the corresponding tables, columns, records & document are created and can be retrieved later using the search feature.

**Cloud Migration:** Developed new features with Microsoft SQL server to that the application can be deployed on cloud with open source PostgreSQL database which increases ROI to customers by reducing their need for individual licenses.

**Advanced Reporting Features:** Created options for enhanced reporting with audit trail capability. Features include interactive charts and archiving as CSV (Comma Separated Values), making it easy to import into reporting products like Excel or other databases. This feature was built using bootstrap responsive UI which will fit to any desktop, tab & mobile browsers.

## Benefits

The client realized the following benefits partnering with Telliant:

- Ownership of a solution that is rich in functionality, high on performance and easy to administer.
- Capitalization on the emerging opportunities in the industry with increased ROI from fast, low cost development.
- Delivery of a solution that automates document storage and retrieval and improved the decision making process.
- Improved user experience of physicians in healthcare provider organizations.

To learn more about how we can help achieve your goals in the ever-evolving world of IT and innovation, please visit [www.telliant.com](http://www.telliant.com)

## TECHNOLOGY ENVIRONMENT

Telliant was responsible for identifying and implementing the most appropriate technology for the various applications in order to meet the performance, cost and usability objectives set by the Client.

### The Major Technology Components and Tools:

- **Languages:**  
C#, .Net and ASP.Net, VB.Net, AJAX, J-Query, JavaScript, CSS, JSON, Bootstrap
- **Architecture:**  
MVC 4.0 with RazorView Engine and Web API
- **Framework:**  
Microsoft .NET 4.5
- **Database:**  
SQL Server 2008
- **Tools:**  
LeadTools 17.5

### Corporate Office:

#### Telliant Systems

3180 North Point Pkwy  
Suite 108  
Alpharetta, GA 30005  
USA

Tel: 678.892.2800

Fax: 678.892.2809

Email: [info@telliant.com](mailto:info@telliant.com)